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CLIMATE REPORT
NATIONAL WEATHER SERVICE DETROIT/PONTIAC MI
119 PM EST SAT FEB 18 2012

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...THE DETROIT CLIMATE SUMMARY FOR THE YEAR OF 2011...

CLIMATE NORMAL PERIOD 1981 TO 2010
CLIMATE RECORD PERIOD 1874 TO 2012

WEATHER	OBSERVED VALUE	DATE (S)	NORMAL VALUE	DEPART FROM NORMAL
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TEMPERATURE (F)

RECORD

HIGH	105	07/24/1934		
LOW	-21	01/21/1984		
HIGHEST	100	07/21	MM	MM
LOWEST	-5	02/10	MM	MM
AVG. MAXIMUM	59.5		59.0	0.5
AVG. MINIMUM	42.8		41.8	1.0
MEAN	51.1		50.4	0.7
DAYS MAX >= 90	23		10.2	12.8
DAYS MAX <= 32	49		41.3	7.7
DAYS MIN <= 32	112		115.4	-3.4
DAYS MIN <= 0	2		3.5	-1.5

PRECIPITATION (INCHES)

RECORD

MAXIMUM	MM	MM		
MINIMUM	MM	MM		
TOTALS	47.70R		33.47	14.23
DAILY AVG.	0.13		0.09	0.04
DAYS >= .01	164		134.5	29.5
DAYS >= .10	89		73.3	15.7
DAYS >= .50	32		20.9	11.1
DAYS >= 1.00	9		5.6	3.4
GREATEST				
24 HR. TOTAL	3.51	MM		
STORM TOTAL	MM			
(MM/DD(HH))		MM		

SNOWFALL (INCHES)

RECORDS

TOTAL	MM	5		
24 HR TOTAL	MM			
TOTALS	66.1		42.7	23.4
LIQUID EQUIV	6.61		MM	MM
SINCE 7/1	6.3		11.2	-4.9

LIQUID 7/1	0.63		
DAYS >= TRACE	71	36.4	34.6
DAYS >= 1.0	17	13.3	3.7
GREATEST			
SNOW DEPTH	16	02/06	
24 HR TOTAL	8.2	MM	
STORM TOTAL	MM		
(MM/DD(HH))		MM	

DEGREE_DAYS			
HEATING TOTAL	5976	6136	-160
SINCE 7/1	MM	2297	MM
COOLING TOTAL	1060	803	257
SINCE 1/1	1060	803	257

FREEZE DATES

RECORD

EARLIEST	MM
LATEST	MM

EARLIEST	MM
LATEST	MM

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WIND (MPH)

AVERAGE WIND SPEED	8.3		
HIGHEST WIND SPEED/DIRECTION	46/270	DATE	07/02
HIGHEST GUST SPEED/DIRECTION	63/270	DATE	07/02

SKY COVER

POSSIBLE SUNSHINE (PERCENT)	MM
AVERAGE SKY COVER	0.70
NUMBER OF DAYS FAIR	40
NUMBER OF DAYS PC	136
NUMBER OF DAYS CLOUDY	189

AVERAGE RH (PERCENT)	70
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WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	0	MIXED PRECIP	2
HEAVY RAIN	42	RAIN	80
LIGHT RAIN	150	FREEZING RAIN	1
LT FREEZING RAIN	11	HAIL	1
HEAVY SNOW	6	SNOW	21
LIGHT SNOW	63	SLEET	11
FOG	231	FOG W/VIS <= 1/4 MILE	19
HAZE	155		

- INDICATES NEGATIVE NUMBERS.
R INDICATES RECORD WAS SET OR TIED.
MM INDICATES DATA IS MISSING.
T INDICATES TRACE AMOUNT.

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CLIMATOLOGICAL STATISTICS FOR THE NWS WHITE LAKE - THE YEAR OF 2011

...TEMPERATURE DATA...
AVERAGE MAXIMUM.... 58.1
AVERAGE MINIMUM.... 39.2
MONTHLY AVERAGE.... 48.6

...PRECIPITATION DATA...
2011 ANNUAL TOTAL42.53
GREATEST MONTHLY TOTAL...7.72
IN MAY
GREATEST DAILY TOTAL.....2.84
ON JULY 28TH

...HEATING DEGREE DAYS...
2011 ANNUAL TOTAL.....2339

...SNOWFALL DATA...
2011 ANNUAL TOTAL.....76.4
GREATEST MONTHLY TOTAL....24.3
IN FEBRUARY
GREATEST DAILY TOTAL.....6.7
ON FEBRUARY 20TH

...COOLING DEGREE DAYS...
2011 ANNUAL TOTAL.....610

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...2011 A YEAR FOR THE RECORD BOOKS IN SOUTHEAST MICHIGAN....

WITH 14 BILLION DOLLAR WEATHER DISASTERS, 2011 WILL BE REMEMBERED AS A YEAR OF EXTREMES FOR THE UNITED STATES. SOUTHEAST MICHIGAN WAS NO EXCEPTION TO THE EXTREME TRENDS OF 2011.

AFTER A PROLONGED COLD AND WET SPRING, THE 2ND HALF OF THE YEAR BEGAN WITH SURGING TEMPERATURES AND THE HOTTEST MONTH EVER RECORDED IN DETROIT. ABOVE NORMAL TEMPERATURES GENERALLY PERSISTED THROUGH THE REMAINDER OF THE YEAR, WITH NOVEMBER ALSO FINISHING MUCH ABOVE NORMAL (5TH WARMEST ON RECORD). ALTHOUGH THE YEAR TIED WITH FOUR OTHER YEARS FOR THE 19TH WARMEST ON RECORD, THE 2ND HALF OF THE YEAR (JULY 1ST THROUGH DECEMBER 31ST) HAD AN AVERAGE TEMPERATURE OF 58.9 DEGREES (3RD WARMEST) BEHIND 1881 AND 1931. IN FLINT AND THE TRI-CITIES, JULY, NOVEMBER, AND DECEMBER ALL RANKED AMONG THE TOP 10 WARMEST FOR EACH MONTH.

IT COULD BE EASILY ARGUED THAT WARMTH WAS NOT THE BIGGEST STORY OF THE YEAR AS A MEMORABLE WINTER TRANSITIONED TO A RECORD-BREAKING SPRING, ONLY TO BE FOLLOWED BY A RECORD-BREAKING AUTUMN FOR DETROIT. THE VERY ACTIVE END TO WINTER GAVE BOTH THE FLINT AREA AND THE TRI-CITIES THEIR SNOWIEST MONTH ON RECORD (FEBRUARY), AS WELL AS DETROIT'S 2ND SNOWIEST FEBRUARY. AS TEMPERATURES WARMED AND WINTER TURNED TO SPRING, FLINT AND DETROIT RECORDED THEIR WETTEST AND 2ND WETTEST SPRINGS ON RECORD, WHILE THE TRI-CITIES EXPERIENCED THEIR 10TH WETTEST. WHILE NEITHER FLINT NOR THE TRI-CITIES FINISHED INSIDE THE TOP 10 FOR WETTEST AUTUMN SEASONS, DETROIT STILL MANAGED TO RECORD ITS WETTEST FALL ON RECORD. BY THE END OF 2011, DETROIT HAD SEEN ITS WETTEST YEAR ON RECORD, FLINT HAD SEEN ITS 4TH WETTEST, AND THE TRI-CITIES SAW THEIR HIGHEST JANUARY-TO-DECEMBER SNOWFALL TOTAL IN THE HISTORICAL RECORD.

THE TOTAL PRECIPITATION FOR THE DETROIT AREA IN 2011 WAS 47.70", AN ALL-TIME RECORD (PREVIOUSLY 47.69 IN 1880), AND 14.23" ABOVE THE 33.47" ANNUAL AVERAGE. THAT INCLUDED 66.1 INCHES OF SNOW, THE 8TH

HIGHEST ANNUAL TOTAL IN THE HISTORICAL RECORD (CURRENT RECORD, 77.2" IN 2008), AND 23.4" ABOVE THE 42.7" CALENDAR YEAR AVERAGE. THE AVERAGE HIGH TEMPERATURE FOR THE YEAR WAS 59.6, +0.5 DEGREES ABOVE THE NORMAL VALUE OF 59.0 AND TIED FOR THE 22ND WARMEST ON RECORD. THE AVERAGE LOW FOR THE YEAR WAS 42.8, +1.0 DEGREES ABOVE THE 41.8 NORMAL AND TIED FOR THE 13TH WARMEST ON RECORD. THE AVERAGE OVERALL TEMPERATURE WAS 51.1, A DEPARTURE OF +0.7 DEGREES FROM THE 50.4 DEGREE NORMAL ND THE 19TH WARMEST ON RECORD.